



Program: UNO Collaboration Meeting in Minneapolis

**Meeting Location: Room 435 Tate Laboratory of Physics,
University of Minnesota, 116 Church St SE, Minneapolis 55455
(612-624-1312)**

Thursday, April 8, 2004

Tour of the Soudan Mine

(Tour Cost: none, sponsored by the U. of Minnesota)

Guided by Marvin Marshak and Alec Habig

Note: Please wear clothes that you don't mind getting dirty, like blue jeans and a sweatshirt. The sweatshirt is good for warmth. Also please wear hiking or construction boots (steel toed if they have them).

14:00	Meet at the Soudan Mine Office
14:30-16:30	Tour of the Soudan Mine
17:00	Leave Mine

Directions: The available airports are Minneapolis-St. Paul (MSP then 225 mile drive), Duluth (DLH then 90 mile drive) and Hibbing (HIB then 45 mile drive). All three airports have usual car rentals. MSP has most flights. DLH has non-stop flights from MSP, O'Hare and Detroit Metro. HIB has flights only from MSP. All three drives are mostly freeway (speed limits of 65 to 70 mph) with ~20 miles of good two-lane highway at the end. If you need a ride to the mine, indicate when you will be arriving (the flight number) at which airport on the day or which hotel you will be staying.

- From the Minneapolis-St. Paul airport: Take left fork coming out of airport towards MN 5 east St. Paul. In about 1 mile cross Mississippi River, freeway becomes West 7th Street. Continue on West 7th Street about 2 more miles to I-35E. Take I-35E north through downtown St. Paul. After 24 miles, I-35E becomes I-35. Continue 109 miles to Exit 237 MN 33 Cloquet. Follow MN 33 north through Cloquet for 20 miles. MN 33 then merges with U.S. 53. Continue on U.S. 53 north for 47 miles. Take a slight right on MN 169. Continue on MN 169 northeast for 21 miles to Tower, MN. Pass through Tower then in 2 miles, you will see the headframe of the mine on the hill to the left. Take the second left off the highway. At the end of the street, turn right, then left, go up the hill and continue to the area of the headframe. Park where you see cars.

It takes less than 4 hours from MSP, so it may be possible for some people to fly in on the day in the morning.

park office: 218-753-2245

lab office: 218-753-6611

Friday, April 9, 2004

		Chair: Marvin Marshak
08:30-09:00	Registration	
09:00-09:05	Welcome and Meeting Logistics	Marvin Marshak
09:05-09:20	Introduction/Meeting Organization	Chang Kee Jung
09:20-10:00	UNO Update/Introduction/Collaboration Organization	Chang Kee Jung
10:00-10:40	Atmospheric Neutrinos: $\bar{\nu}_{\mu}$ and Neutrino Mass Hierarchy	Sergio Palomares-Ruiz
10:40-11:00	Coffee Break	
		Chair: Maury Goodman
11:00-11:35	Status of the SuperK analysis of Tau appearance in the atmospheric neutrino sample	Tokufumi Kato
11:35-12:10	SuperK L/E Oscillation Analysis of the Atmospheric Neutrinos	Clark McGrew
12:10-12:30	Report on APS Neutrino Study – Solar and Atmospheric nu	WG: Atmospheric nu's Tony Mann
12:30-14:00	Lunch	
		Chair: Bob Wilson
14:00-14:50	Theoretical Review of Supernova Relic Neutrinos	Louie Strigari
14:50-15:30	Astrophysical Neutrino Searches	Alec Habig
15:30-15:50	Coffee Break	
		Chair: Jeff Wilkes
15:50-16:25	Update on BNL VLBL study	Brett Viren
16:25-17:00	A $\bar{\nu}_e$ appearance background study for BNL VLBL	Chiaki Yanagisawa
19:00	Collaboration Dinner	

Saturday, April 10, 2004

09:00-09:40	Introduction to Rock Mechanics	Chair: Tony Mann Lee Petersen
09:40-10:20	Status of NUSEL at Homestake	Marvin Marshak
10:20-11:00	A Fréjus Site Based Large International Underground Laboratory Project	Luigi Mosca
11:00-11:20	Coffee Break	
11:20-11:50	Report from CAUSE and Henderson Update	Chair: W. Toki Bob Wilson
11:50-12:20	Geology of the Henderson Mine Area and Core Drilling	Mark Kutchta
12:20-14:00	Lunch Advisory Committee Meeting	
14:00-14:20	Cosmic Ray Flux Measurements with SALTA	Chair: U. Greife Dan Claes/Jeff Wilkes
14:20-14:40	Water Containment/Cavity Treatment R&D	Dave Warner
14:40-15:10	Status report on ReFeRence Photosensor Development	Dan Ferenc
15:10-15:45	Status of the UNO Software	Brett Viren
15:45-16:00	Coffee Break	
16:00-17:30	Discussion (Next Actions) NSAC/HEPAP Joint Committee on Underground Experiments R&D/Planning proposal Next meetings: 1) Video Conference 2) Unification Festival/UNO Collaboration Meeting: Colorado, October 2004	Chair: C.K. Jung
17:30	Meeting Adjourns	